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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,044	09/21/2005	Hans-Helmut Bechtel	DE 030094	6192

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

WITHERSPOON, SIKARL A

ART UNIT

PAPER NUMBER

1621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/550,044

Applicant(s)

BECHTEL ET AL.

Examiner

Sikarl A. Witherspoon

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1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in South Africa on January 17, 2003. It is noted, however, that applicant has not filed a certified copy of the South African application as required by 35 U.S.C. 119(b). The examiner would like to point out that that European application 03100779.2, filed March 26, 2003 is listed on applicants' oath; however, this application is not consistent with the foreign application, i.e., the South African application that is based on PCT/IB04/00080.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (US 5,099,047) and Tsunoda et al (US 4,396,551) in combination.

The instant claims recite a process for recovering an active catalyst component from a process stream comprising the dissolved active catalyst, aldols, acetals, and/or esters, by admixing an alcohol comprising a C1-C10 alcohol, with the process stream to form a solid active catalyst, and then recovering the active catalyst. The claims also

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recite a hydroformylation process wherein the active catalyst is recovered in a like manner.

Sato et al teach a hydroformylation reaction wherein the catalyst is recovered as a Group VIII metal complex in the presence of a trialkyl phosphine (abstract). For precipitation of the active catalyst, a solvent such as methanol, ethanol, propanol, or n-butanol, is added to the reaction mixture at a temperature from -78 to 80° C. The metal solid complex is separated by a usual solid-liquid separation, such as centrifugal separation or centrifugal filtration (col. 5, lines 25-45). It should be noted that the reference teaches that it is known to be common to separate or recover a Group VIII metal complex from the reaction solution by distillation (col. 1, lines 25-33).

The differences between Sato et al and the instant claims are that Sato et al do not *expressly* state that the process stream contains aldols, acetals, and/or esters, and Sato et al do not teach a dihydric alcohol for the precipitation treatment, as claimed herein.

With regard to the first difference, while Sato et al is silent with regard to what compounds constitute the process stream, the reference teaches that in a hydroformylation reaction, various high boiling point substances are produced as by-products (col. 1, lines 52-54). A person having ordinary skill in the art would have recognized that in addition to aldehydes and/or alcohols that may be produced by hydroformylation, by-products including acetals and esters would be produced. As such, this limitation is *prima facie* obvious.

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Regarding the second difference, Sato et al does not teach a dihydric alcohol; however, Tsunoda et al teach a method for the recovery of Group VIII metal solid complexes from a reaction solution by precipitating said complex with the addition of alcohols including ethyl alcohol, n-propyl alcohol, and ethylene glycol (abstract; col. 5, lines 4-14).

Therefore, Tsunoda et al teach the equivalence of monohydric alcohols, i.e., ethanol and propanol, and dihydric alcohols, i.e., ethylene glycol, in processes for recovering Group VIII metal complexes. Accordingly, it would have been prima facie obvious to a person having ordinary skill in the art to employ a monohydric alcohol and/or a dihydric alcohol, and combinations thereof, since the combination of the two references suggests the equivalence of such alcohols being employed in processes for recovering these metal complexes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 571-272-0649. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

saw

Sikarl A. Witherspoon
SIKARL A. WITHERSPOON
PRIMARY EXAMINER